



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region II

**Subject:** SITREP #37  
Region 2 Hurricane Irma/Hurricane Maria  
  
Edison, NJ  
Latitude: 40.5230137 Longitude: -74.3411515

**To:** Hurricane Maria SitRep Distribution, EPA

**Thru:** REOC Regional Incident Coordinator Eric Mosher; REOC Deputy Regional Incident Coordinators, Christopher Jimenez (PR), Shawna Hoppe (REOC), Neil Norrell (USVI)

**From:** Situation Unit

**Date:** 10/12/2017

**Reporting Period:** 1400 HRS 10/11/2017 to 1400 HRS 10/12/2017

**Executive Summary**

EPA responders, including OSCs, CICs, Safety Officers, CID/NCERT agents, and EPA contractors, are performing post-storm response activities, including assessments at regulated facilities, NPL/Removal sites, drinking water and wastewater facilities, and marine operations. Resource orders have begun for additional personnel for the response.

The Regional Emergency Operations Center (REOC) in Edison NJ remains fully staffed and operational. One Region 2 person is staffing the ESF-10 desk at the FEMA NRCC in Washington D.C. Two OSCs and one CEPD personnel are at the FEMA IOF in San Juan, along with Assistant PIO from media relations and one Assistant PIO for community involvement. The REOC Resource Unit is maintaining a special communications schedule to ensure continuous contact with EPA and contractor personnel within Hurricane impacted areas. Plans for the assessment of fixed facilities, Superfund sites, and critical infrastructure are in place and are being utilized. The REOC Planning and Operations Sections are developing plans for the assessment of areas of special concern and debris management.

As of 10/11/17, initial field reports from two NPL Sites did not indicate that there was any improper collection of drinking water from groundwater wells. However, information on the Sites is limited. The Sites will be revisited as additional information becomes available.

EPA is coordinating with USACE on locating collection and staging areas. USCG and EPA have established Marine Operations to locate and assess sunken vessels.

Currently there are **153 EPA, 1 USCG and 92 contractors** involved in the response. The overall staffing levels are expecting to increase as other MAs are issued by FEMA.

**1. Introduction**

**1.1 Background**

<b>Site Number:</b>	<b>Contract Number:</b>
<b>D.O. Number:</b>	<b>Action Memo Date:</b>
<b>Response Authority:</b> Stafford Act	<b>Response Type:</b> Emergency
<b>Response Lead:</b> FEMA	<b>Incident Category:</b> Removal Assessment
<b>NPL Status:</b>	<b>Operable Unit:</b>
<b>Mobilization Date:</b> 9/3/2017	<b>Start Date:</b> 8/31/2017
<b>Demob Date:</b>	<b>Completion Date:</b>
<b>CERCLIS ID:</b>	<b>RCRIS ID:</b>
<b>ERNS No.:</b>	<b>State Notification:</b>

**1.1.1 Incident Category**

An emergency response is warranted under the Stafford Act for responding to threats associated with Hurricane Irma and Hurricane Maria. The President has made emergency declarations and disaster declarations for Puerto Rico and all of the U.S. Virgin Islands following Hurricanes Irma and Maria. Declarations can be found on FEMA's website at <https://www.fema.gov/disasters/>. EPA is responding under these delegations and authorities.

**1.1.2 Site Description and Locations**

Puerto Rico is a U.S. Commonwealth consisting of a main island and two smaller islands: Culebra and Vieques. Approximately 3.4 million people live in Puerto Rico with a diversified terrain with a central mountain range, southern dry zones and coastal beaches. With varied natural resources, such as El Yunque National Rain Forest and prized beaches, Puerto Rico receives many tourists each year. There are 78 municipalities throughout Puerto Rico.

The United States Virgin Islands (USVI) consists of three islands; St. Thomas, St. John and St. Croix. The islands receive thousands of tourists annually, particularly on cruise ships through the port in Charlotte

Amalie. Topography is consistent with Caribbean islands in that the center areas are elevated peaks that slope to flat coastal areas. The Virgin Islands are surrounded by sandy beaches and coral reefs. Eighty percent of St. John is a National Park, and Buck Island off of St. Croix is a National Underwater Reef.

### 1.1.3 Description of Threat

Threats include the release of chemicals and petroleum products as a direct result of high winds and flooding. Damage to facilities located within impacted areas have the potential to transport containers, chemical waste, and process equipment that contain hazardous materials. High winds have the potential to collapse chemical and oil storage tanks and damage on-shore chemical facilities. Water and wind damage to commercial and residential buildings can generate large amounts of household hazardous waste (HHW) which poses a threat to public health and the environment. Because of the insular geography of the impacted areas there is an additional threat of releases of chemicals and petroleum products into sensitive shoreline areas, including Green Turtle breeding grounds, mangrove swamps, and coral reefs. In the aftermath of Hurricanes Irma and Maria, the entire power grid on Puerto Rico was put out of commission, and drinking water/wastewater-treatment facilities on Puerto Rico and the Virgin Islands have been severely impacted.

## 1.2 Incident Objectives

### Region 2 - Hurricanes Maria Incident Objectives

1. The health and safety of our responders is our highest priority. Develop health and safety messages daily for all field operations;
2. Ensure health and safety of the public by conducting environmental assessments and operating in accordance with approved site safety plans;
3. Coordinate deployments and field activities with community involvement coordinator and Assistant Safety Officers;
4. Continue coordination with OSC deployed to the NRCC in Washington DC on logistics and FEMA Mission Assignments;
5. Continue coordination with OSCs deployed at the FEMA Interim Operating Facility in San Juan, PR;
6. Coordinate and prioritize the assessment of Hazardous Material and Oil Response sites in Puerto Rico and USVI;
7. Coordinate with CEPD, prioritize and perform drinking water and waste water assessment targets in Puerto Rico and the USVI;
8. Coordinate, prioritize and perform fixed facility assessments of RMP, FRP and SPCC facilities in Puerto Rico;
9. Perform preparation activities for upcoming field deployment of clean-up resources for abandoned containers, household hazardous waste, hazardous debris and hazardous material staging areas in Puerto Rico and USVI;
10. Coordinate all field activities with CEPD program office staff and FEMA division coordinators. Support CEPD operations that are within the scope of the FEMA Mission Assignments;
11. Support USCG sunken vessel recovery operations and coordinate operations with ESF10 partner USCG;
12. Continue drinking water sampling and facility assessments as coordinated and prioritized with DPRN;
13. Develop and implement a full staffing plan to increase the response effort to meet the FEMA mission assignments and then for continuous operation Puerto Rico, USVI and in the REOC.

### Region 2 – Hurricanes Maria Management Objectives

- Protect the health and safety of EPA employees during re-deployment to VI and PR in the aftermath of Hurricane Maria.
- Implement a re-position plan to address communications schedules, employee location information, rallying points, and a cellular and satellite communication plan.
- Coordinate with FEMA on the re-position and remobilization of EPA responders.
- Implement a re-mobilization plan.
- Minimize social, political, and economic adverse impacts.
- Maintain communication and briefing schedule with R2 senior executives and EPA Headquarters.
- Support a consistent communications approach agency-wide, enabling EPA to act and speak in unison during these incidents.
- Provide situation reports and other information on schedule provided by RIC.
- Provide guidance for length of work day and deployments as it pertains to this specific event.
- Identify clearly defined roles for both Regions and Headquarters.
- Identify long-term recovery objectives the Agency may be requested to support, and determine resources needed to support/sustain those requests to accomplish the objectives.
- Secure NPL and removal sites. Regulated facilities and Superfund and oil sites will be surveyed post storm fall.
- Identify vulnerabilities at regulated facilities.
- Address any immediate hazardous substance releases or oil spills resulting from the storm's impact.
- Assist state and local agencies in ensuring safety of drinking water systems.
- Monitor air quality when/if necessary in response to conditions on the ground.
- Coordinate logistics for deployed personnel to provide transportation, lodging, food & water, security, and ground transportation in the impacted areas.
- Coordinate national resources to assist the Region.
- The response will use the Region's incident specific Data Management Plan (DMP).
- In collecting, sharing, and analyzing environmental data, EPA will give primacy to data with potential human health consequences.
- EPA will work to ensure that its decision-makers have access to the data and expertise they need to make decisions based on sound science.

## 1.3 Critical Resource Needs

### PR

Commercial air traffic to PR remains limited. In addition, hotel accommodations are limited, sometimes necessitating double rooming.

The unavailability of equipment or transportation capacity to date has seriously impacted and delayed EPA's efforts to perform the hazardous waste and debris cleanup components of the FEMA mission assignments. Requests for transport of personnel and equipment have been made through the proper channels at the NRCC. There have been significant difficulties in scheduling barge space to transport

equipment from CONUS. There appears to be progress in this area, however, the barge schedule remains indeterminate.

Electric utilities are intermittent throughout the Commonwealth. Fuel to run generators is scarce in some areas. Additional generators are needed to support critical infrastructure.

Cellular communications and internet connectivity remain intermittent in most areas of PR, making communication with the field teams difficult. Some improvement has been observed, especially in the most populated areas.

Dangerous driving conditions are evident in many of the mountainous areas of PR due to the excessive rain and denuded hillsides. Health and Safety identified USGS data has collected satellite imagery that locates many of the recent mudslides. This data is being added to the EPA Viewer.

## **VI**

Commercial air traffic to the USVI remains limited. This is making transport of personnel and equipment needed to support the missions assigned and requested of EPA difficult.

Fuel to run generators is becoming scarce and additional generators are needed to support critical infrastructure.

Cellular communications and internet connectivity on all islands remains intermittent, making communication with the field teams difficult.

Driving conditions remain hazardous due to downed power poles/lines and power outages causing a lack of traffic signals making travel around the islands difficult and timely.

### **1.4 Strategic Considerations**

Operational tactics are managed through the Operation Section of the response. Strategic considerations that may be used for decision-making include: adverse weather conditions, damage to infrastructure including airports, hotels, blocked/damaged roads, receipt of Mission Assignments, requests for assistance on the local level, integration with ESF-10 partners, logistical concerns, available transportation of assets, resources, and management objectives.

## **2. Current Activities**

### **2.1 Operations Section**

#### **REGION 2 REGIONAL EMERGENCY OPERATIONS CENTER (REOC)**

The RICT remains fully engaged in the response with senior meetings and briefings conducted daily. The DRIC continues to develop mobilization and staffing plans to support upcoming operations in support of FEMA Mission Assignments for Operational Support, Assessment Direct Federal Assistance Cleanup and Drinking Water/Waste Water assessment and support in Puerto Rico.

Resource orders have been entered into the WebEOC Personnel Resource Log for mobilization of an additional 110 personnel for arrival on or about 10/15/2017. As above, resources such as lodging/berthing and air transportation are limiting factors.

#### **PUERTO RICO**

##### **North Branch**

Assessment operations on 10/11/17 included assessments to fixed facilities in Caguas, Cupey, San Juan, Dorado, Carolina and Manati by the two assessment teams. The teams were comprised of EPA personnel (OSC, Safety, Community Involvement, CID) and contractor support (RST). Operations reported no security incidents.

A quick response team assessed two NPL Sites in the North Branch – the Hormigas Groundwater Plume in Caguas and the Dorado Groundwater Contamination Site in Dorado – to investigate reports that residents were drawing drinking water from groundwater monitoring wells on the Sites. The teams did not observe these activities at the Sites, however, they will revisit the Sites when better information on the well locations is available.

##### **South Branch**

Assessment operations on 10/11/17 focused on assessment of fixed facilities. The two teams in South Branch visited facilities in Salinas, Santa Isabela, Ponce and Penuelas. The teams were comprised of EPA personnel (OSC, Safety, Community Involvement, CID) and contractor support (RST). Operations reported no security incidents.

##### **West Branch**

On 10/11/17, team members assessed fixed facilities in Camuy municipalities. The teams were comprised of EPA personnel (OSC, Safety, Community Involvement, CID) and contractor support (RST). Operations reported no security incidents.

Dangerous driving conditions were present due to the heavy rainfall and closed roads may be limiting future assessments. The ASO recommends that any travel in the mountainous areas be conducted early in the day due to afternoon rain and thunderstorms.

#### **Incident Command**

The Puerto Rico Incident Commander is coordinating with the CEPD Water Inspectors, remedial and RCRA staff on site and facility assessments. The IC coordinated with EPA/CID for security support. A PIO Coordinator is supporting Incident Command. The IC is coordinating with the USCG for Marine Operations and hazardous material response related to sunken vessel recovery.

EPA continues to coordinate with the US Army Corp of Engineers in support of EPA's hazardous materials removal operations Mission Assignment. USACE is currently completing the permit process for several locations for debris collection staging areas. EPA plans to co-locate hazardous material staging areas at all identified staging locations. Until USACE's areas are identified, EPA is coordinating with EQB to establish a temporary hazardous materials staging area. EPA is conducting Site visits with USACE and

EQB at the purposed USACE staging areas, as well municipal collection areas.

The EPA Emergency and Rapid Response Services (ERRS) contractor is planning to ship necessary equipment to support the debris MAs, using a FEMA transport. Once all the equipment is assembled FEMA will determine the ship date for the materials. In the interim, IOF staff have approached FEMA to obtain vehicles that can be used to support our debris MAs.

A staging area at the US Army Garrison - Ft. Buchanan, in Guaynabo, has been secured for the eventual staging of this equipment. This location will only be used to stage equipment and will not be a hazardous materials staging area. Additional personnel, both EPA and contractors, continue to mobilize to PR in support of the mission assignment.

Field teams are responding to reports of residents using groundwater monitoring wells at NPL sites as sources of drinking water. Quick response teams consisting of OSCs, CEPD, CID, and RSC contractors are visiting these Sites to investigate these reports.

As of 10/11/17, initial field reports from two NPL Sites did not indicate that there was any improper collection of drinking water from groundwater wells. However, information on the Sites is limited. The Sites will be revisited as additional information becomes available.

#### **NPL Site Assessments**

EPA personnel continue to conduct preliminary assessments at Superfund or Oil Response Sites in Puerto Rico and evaluate the potential for contamination to cause off-site impacts as a result of Hurricane Maria. The REOC is currently following up with the RPMs for each site.

#### **FEMA IOF/PR**

EPA continues coordination with FEMA, USACE, USCG, and the Commonwealth of PR in regards to field operations, assessment of fixed facilities and data transfer.

#### **USCG Marine Operations in Puerto Rico**

USCG, EPA and contractors have established marine operations to locate and assess sunken vessels. Currently operations are focused on the eastern coast of PR. On 10/12/17, six teams conducted on-the-water operations to locate and evaluate the condition of sunken vessels.

#### **U.S. VIRGIN ISLANDS**

##### **STX:**

EPA continues to attend the Debris Management Task Force meetings regarding debris management and curtain burn operations. EPA was informed burn activities will happen on all three islands.

Facility assessments continue. The facility assessments for STX are anticipated to be complete by the end of the week.

EPA continues to coordinate with the USCG on supporting vessel recovery operations.

EPA ERRS contractor procured a method for shipping of materials and equipment to the USVI. The materials and equipment will be shipped via barge leaving the port in Fort Lauderdale, Florida Thursday October 12<sup>th</sup> and will arrive in STT Sunday October 15<sup>th</sup>. The barge will off load some materials and equipment in STT and will then travel to STX and off load the remaining materials and equipment on Monday October 16<sup>th</sup>.

##### **STT/STJ:**

EPA continued the assessment of EPA regulated facilities.

EPA IC attended the Emergency Operations Briefing for ESFs at Virgin Islands Territory Emergency Management Agency (VITEMA). Summary of each ESF day's activities is provided to FEMA by each ESF lead.

EPA continues to coordinate with DPNR on the pesticides and herbicides contained at the Cost U Less (membership type wholesale club) store that had sustained heavy storm damage. EPA intends to revisit the store to ensure proper handling of the materials is occurring.

EPA continues to coordinate with the USCG on supporting vessel recovery operations

#### **Debris Management:**

EPA has been requested to assist with the handling and disposal of HHW, medical waste and e-waste. EPA will also assist with the preparation of white goods for recycling by VIWMA. A collection area has been identified on STX which is located adjacent to the Limetree Facility. EPA will also potentially conduct air monitoring at the collection area for standard chemicals of concern associated with this type of activity.

EPA personnel continue working with the territory for transportation & disposal of stockpiled medical waste at the hospitals on Christiansted (approx. 50,000 lbs) and on St Thomas (approx. 80,000 lbs). EPA personnel met with the Acting CEO/General Counsel for the Governor Juan F. Luis Hospital on STX discuss medical waste disposal activities and needs. EPA personnel met with the contractor "VI Regulated Wastes" to scope work of medical waste disposal for STX and STT. EPA anticipates receiving a proposal from the contractor for these services by Saturday 10/13.

EPA response contractors met with the Department of Public Works to begin setting a time table for preparing a dedicated site for collection of Household Hazardous Waste (HHW) and the processing of white goods. Initial target date to begin collection is for 10/18/17 coinciding with the arrival of key supplies for this work.

USACE has requested EPA assistance with air monitoring during the USACE's air curtain burning of vegetative debris activities should the burn take place. USACE intends to segregate construction and demolition (C&D) debris prior to burn operations. The C&D debris will be handled by VIWMA. EPA was informed burn activities will happen on all three islands.

#### **USCG Marine Operations in USVI**

*Data Management*

EPA (1 OSC, 3 RST) met with USCG, USACE, FEMA, Fish & Wildlife, DPNR and St. Croix Yacht Club personnel.

One RST performed data entry while one accompanied the water assessment team and one went with the land based assessment team. RST used iPads to input the vessel data into Survey 123 forms in the field.

EPA reduced the number of active data points for distressed vessels identified on the NOAA Environmental Response Management Application (ERMA) for St Croix from 122 to 86.

EPA RST will continue inputting the vessel assessment info into the Geo Platform which is then uploaded to ERMA.

Land and water based teams will continue operations to ground truth the remaining ERMA points.

#### *Community Engagement*

St Croix Yacht Club informed DPNR of six missing vessels presumed sunk but not identified on the ERMA map.

DPNR is compiling a list of owners of the distressed vessels based upon their initial assessments. Owners will be notified by phone, by certified letter and by public service announcements that their vessel needs to be removed.

The USVI PIO is finalizing a public service announcement which should be issued this week sometime advising owners of sunken or grounded boats that they need to remove them by the deadline or the USCG will remove them. USCG has set a hard date of November 10<sup>th</sup> after which all distressed vessels will be removed.

Vessels located in sensitive areas will be removed prior to Nov 10<sup>th</sup> and staged west of the seaplane ramp in Christiansted pending the owner's response. Vessels whose owners sign the waiver allowing removal of them will be removed ASAP.

#### *Response Actions and Issues*

One fuel recovery team staffed by NRC, USCG and RST personnel will begin removing fuel from the first leaking vessel located in Salt River tomorrow.

USCG will contract either National Response Corp (NRC) and/or Resolve Maritime to remove and dispose of fuels removed from vessels via VI Regulated Waste. They will also remove the batteries and dispose of them through VI Regulated Waste.

NRC personnel placed boom around a sport fishing boat leaking fuel in the Salt River. This will be addressed first once fuel removal operations commence.

## **2.2 Planning Section**

### **2.2.1. Resources**

Personnel	EPA Edison, NJ NYC	FEMA NRCC, DC	San Juan, Puerto Rico*	Mayaguez, Puerto Rico	Ponce, Puerto Rico	St. Croix USVI*	St. Thomas/ St. John USVI*	Totals
EPA	71	1	23	7	8	11	7	128
CEPD (EPA)	0	0	22	0	2	0	1	25
START/ RST	15	0	16	2	2	5	12	52
ERRS	8	0	6	0	0	12	14	40
Coast Guard^	1	0	0	0	0	0	0	1
Totals	95	1	67	9	12	28	34	246

\*Number includes personnel working at IOF, EOC, CEPD field inspectors.

^Number includes Coast Guard personnel working directly with EPA.

**Please refer to the Personnel On-Site section four for further information regarding personnel.**

### **2.2.2 Environmental Unit:**

The Environmental Unit continues to track the status of certified drinking water labs on PR and VI. No changes to the tracking sheet were needed for 10/11/17. The EU are continuing to work with DESA on evaluation of the laboratories. EU received a briefing on the status of the PREQB laboratory and the PR DOH laboratories. The EU received a verbal report today and expects a full report on Tuesday on the inspected labs' current analytical capabilities and capacity.

The EU received a draft plan from National Homeland Security Research Center for a tiered approach for analysis of Public Water Supplies. The plan has been moved to CEPD for review and comment.

The EU continues to prepare and track progress on the development and approval of QAPPs for the sampling or monitoring.

### **2.2.3 Documentation Unit**

No update during this report period.

### **2.2.4 GIS and Data**

The Data Unit processed field data collected yesterday and updated reporting tables for the management

report. Data continued processing Survey 123 forms in EPA Geoplatform. Data coordinated with Region 2 GIS to present draft story map briefing tool to PAD. PR Waste Water form was updated. Data coordinated with PR data management leaders regarding critical data management need. Data is identifying overflow pump station lat/long coordinates (on-going). Data Viewer was updated with information from 10/11. Data reconciled RPM information and provided to PR ops.

### 2.3 Logistics Section

Logistics has been coordinating with Contracting Officer and Lodging Unit Leader to address immediate and near future lodging needs. Logistics is working on RFP's for the rental of nine Multi-Rae Pro's with Calibration Gas and attachments.

### 2.4 Finance Section

As of 10/12 EPA has a total of 11 active MAs issued by FEMA. These MAs are to maintain REOC operations, conduct assessments in the impacted areas of PR and VI, and initiate limited hazmat recovery in the VI. In response to the devastating impact of Hurricane Maria on PR and the VI, the ESF10 desk continues to interact with FEMA for additional Mission Assignments for RRCC/JFO/EPA EOC, staffing and assessments, and environmental assessments for both VI and PR.

FEMA MAs are detailed in the daily Management Report and display the purpose of the MAs, total funding, and burn rates.

### 2.5 Other Command Staff

#### 2.5.1 Safety Officer

The Safety Officer is Greg DeAngelis who can be reached at 908-402-4473 (cell).

Leptospirosis fact sheet has been posted to both SharePoint and the website. A coordination call was made with ASO concerns referencing ASO duties & responsibilities. A coordination call was made with HQ referencing the qualified Safety Officer list. Safety coordinated with DRIC concerning providing vaccine and physical requirements to the personnel on the Region 2 availability list. Safety attended the People Plus training. GIS data link was provided to the data unit concerning mudslide satellite imaging. Safety coordinated with OEM concerning the need to conduct an ICS404 course in November. Consolidated 214 information from ASOs. There were no reported EPA/EPA Contractor occupational illnesses or injuries.

**SITREP Safety Message:** There have been confirmed cases of Leptospirosis in both Puerto Rico and USVI from contaminated flood waters. Avoid any contact with flood or other contaminated waters if possible!

#### 2.5.2 Liaison Officer

The extension of the estimated completion date for the VI oil/hazmat field operations MA was finalized on 10/12. This amendment extended the end date to 11/30, with no additional funding requested at this time.

The LNO continues to work with the PR DRIC and FEMA on the request for assistance in transporting ERRS equipment to PR. With the successful departure of a barge with the ERRS equipment for the VI, the RRF requesting FEMA's assistance in transporting that equipment has been cancelled.

#### 2.5.3 Information Officer:

The PIO is Janie Acevedo, who can be reached at 469-222-7810. The Assistant PIO for Community Relations is Pat Seppi, who can be reached at 646-369-0068, and the Assistant PIO for Media Relations is Rusty Harris-Bishop, who can be reached at 415-694-8840. All press inquiries are being managed through the Office of Public Affairs.

A DVIDS video "Community Water Assessment Mission" is now posted on <https://www.dvidshub.net/video/557337/community-water-assessment-mission>. The REOC and Field PIOs are working with reporters from the Associated Press and El Nuevo Dia to do stories on EPA's work on wastewater and drinking water facility assessments, respectively. A Maria update news release was issued on October 11, 2017 "[EPA Hurricane Maria Update for Wednesday, October 11th](#)". The news release was translated into [Spanish](#) and posted to the Web. The news release generated a lot of media interest in our statement that people are drinking, or may be attempting to drink, water from Superfund sites in Puerto Rico. We are working closely with Operations, the Regional Administrator and the Regional Incident Commander to provide an update on October 12 to the media and the public on steps that the EPA and FEMA are, and will be, taking to address the issue. We continue to provide all Region 2 staff with relevant Maria news clips and EPA news releases. News releases are being translated to Spanish and posted and distributed widely by the PIO.

The EPA Hurricane Maria web site at [www.epa.gov/hurricane-maria](http://www.epa.gov/hurricane-maria) is being managed by Region 2 and the HQ EOC.

#### Media Inquiries:

Reporters should email their inquiries to [press@epa.gov](mailto:press@epa.gov)

#### Community Involvement:

There are currently three CIC's in San Juan, one CIC in Mayaguez, two CIC is in Ponce and one CIC in the USVI. Our CIC's will be working with field assessment teams on outreach.

The PIO and PAD management are continuing to identify PIOs, bi-lingual Community Involvement Coordinators and community relations support for the USVI and Puerto Rico assessment and cleanup teams. Bi-lingual Community Involvement Coordinators (CICs) are assisting the assessment teams in Puerto Rico. To guide our outreach efforts in Puerto Rico and the USVI, a Hurricane Maria Community Outreach Plan has been developed.

Members of the public should be directed to EPA's toll free hotline 1-888-283-7626. This line will now be staffed during regular business hours (Eastern).

#### 2.5.4 Drinking Water and Water Treatment



## **Puerto Rico Drinking Water Status PRASA:**

The La Plata Dam was reenergized and will be able to supply additional drinking water to 140,000 clients in the Metropolitan Area, including municipalities in Bayamon, Toa Baja, and Toa Alta.

### **Non-PRASA Water Treatment Systems:**

Currently working with FEMA, USACE, EPA, and DOH to coordinate federal support to Non-PRASA drinking water facilities. In Puerto Rico, there are 297 independent private and community water treatment systems that serve approximately 4% of the population. Details of proposed visit schedule for EPA and DOH Assessment Teams was sent to EPA Region 2 Puerto Rico Incident Coordinator.

EPA is working with PRDOH and DOD, HHS and FEMA, in assessing the non-PRASA drinking water systems throughout PR. Such systems provide drinking water from wells and surface water to isolated communities located in rural areas in PR. Deployed teams assess drinking water quality, assess the condition of the systems, and identify other immediate needs (i.e., food, shelter, medical support, etc.). Identified needs are referred to FEMA/PREMA.

### **Puerto Rico Wastewater Status:**

- 22 of the 51 wastewater treatment plants (WWTPs) operated by PRASA are out of service.
- 29 WWTPs are working on alternate power.
- Most of the WWTPs that are out of service are not receiving any sewage due to collapsed trunk sewers or main pump stations with operational problems.
- Of the 22 WWTPs out of service, 14 are located upstream of a drinking water intake. These facilities are:
  - o Aibonito (1.8 MGD) – Lack of Diesel.
  - o Barranquitas (0.6 MGD) – Lack of Diesel.
  - o Cayey (4.0 MGD) – Main trunk sewer collapsed, no sewage reaching the plant.
  - o Comerio (1.0 MGD) – Main trunk sewer collapsed, no sewage reaching the plant.
  - o Jayuya (1.0 MGD) – Lack of Diesel.
  - o Utuado (2.0 MGD) - Main trunk sewer collapsed, no sewage reaching the plant.
  - o Ciales (1.5 MGD) – Main trunk sewer collapsed, no sewage reaching the plant.
  - o Morovis (1.7 MGD) – Alternate power unit out of service.
  - o Unibon Morovis (0.2 MGD) – Lack of Diesel.
  - o Corozal (1.25 MGD) - Main trunk sewer collapsed, no sewage reaching the plant. PRASA already has a contractor on site. It may take two weeks for repairs.
  - o Naranjito (0.8 MGD) - Alternate Power Unit out of service.
  - o San Sebastian New (1.0 MGD) – Facility suffered major equipment damages since it was completely flooded by the Culebrinas river.
  - o San Sebastian Old (0.5 MGD) – Collapsed Trunk sewer, no entrance to the facility.
  - o Maricao (0.25 MGD) - Main trunk sewer collapsed, no sewage reaching the plant.
- The remaining 8 WWTPs out of service are:
  - o Fajardo (9.2 MGD) - Alternate Power Unit out of service.
  - o Rio Grande Estates (0.8 MGD) - Alternate Power Unit out of service.
  - o Humacao (8.2 MGD) – Alternate Power Unit out of service.
  - o Yabucoa (1.5 MGD) Alternate Power Unit out of service.
  - o Carolina (45 MGD) – Main Pump Station (Torrecillas) out of service. No influent to the plant.
  - o Arecibo (10.0 MGD) – Influent Pump Dry Pit Flooded.
  - o Dorado (4.05 MGD) - Facility suffered major equipment damages since it was completely flooded by the La Plata river.
  - o Toa Alta (0.8 MGD) – Plant was flooded, major equipment damages.
- The main trunk sewer that feeds the Barceloneta WWTP (8.0 MGD) was repaired and the overflow ceased yesterday.
- PRASA owns close to 800 sanitary pump stations. PRASA has being able to assess around 80% of the pump stations.
- Today, at least 247 sanitary pump stations are overflowing sewage due to lack of power, malfunctioning power generator or pumping problems.
- Of these 247 pump stations, 92 are located upstream of a water supply intake.
- The biggest concern is the Torrecillas Pump Station, which is tributary to the Carolina WWTP and is the largest pump station in the island. The station, which currently pumps around 25 MGD suffered major damages due to flooding.

### **USVI Facility Assessment Summary**

#### **USVI Drinking Water Status**

VIWAPA is reporting:

- o While water service remains available throughout Cruz Bay, St. John, there are two days of emergency water storage on the island.
- o There are six days of emergency water storage on St. Thomas. The Water Division continues to work with electrical crews to re-energize additional pump stations. The water division is working with FEMA and WAPA electric crews to restore service to two pumps stations which are currently off line. The pump stations, once restored would allow a resumption of potable water to Savan and Contant Knolls communities.

- o On St. Croix, there are four days of emergency water storage. WAPA is pumping at full capacity at Contentment, Mount Welcome and Concordia pump stations. This has facilitated water service to mid-island and Frederiksted town.
- Field Reports
- STX:
  - EPA completed the assessments of potable drinking water supplies at the schools prioritized for re-opening by the V.I. Dept. of Education.
  - Drinking water sampling continued in coordination with DPNR. Samples collected are taken to the Ocean Systems Lab on STX for microbial analysis.
  - DPNR continues to resample facilities which had previously tested positive for the presence of bacteria.
  - EPA continues to coordinate drinking water sampling with DPNR. DPNR continues to notify the proprietors of the affected systems to ensure proper disinfection measures are taken.
- STT/STJ:
  - EPA completed the assessments of potable drinking water supplies at the schools prioritized for re-opening by the V.I. Dept. of Education on STT and STJ.
  - Drinking water sampling activities continue. EPA continues to coordinate drinking water sampling with DPNR. Samples collected are taken to the Ocean Systems Lab on STT for microbial analysis.
  - EPA is continuing to coordinate with DPNR to prioritize drinking water facilities to be assessed and sampled.

#### **USVI Wastewater Status**

- VIWMA continues assessments of all waste water facilities. Most facilities assessed to date either need a generator to power the facility or fuel for the facility. All critical needs for the facilities have been relayed to the appropriate ESF. No further action has been requested of EPA at this time.

### **3. Participating Entities**

#### **3.1 Unified Command**

EPA is staffing the ES-10 desk at the FEMA NRCC in Washington, D.C. EPA remains actively engaged in UC with federal, state, and local partners.

#### **3.2 Cooperating Agencies**

United States Coast Guard (USCG)  
 Agency for Toxic Substances and Disease Registry (ATSDR)  
 Federal Emergency Management Agency (FEMA)  
 United States Army Corp. of Engineers (USACE)  
 Puerto Rico Environmental Quality Board (PREQB)  
 Puerto Rico Department of Natural and Environmental Resources (PRDNER)  
 Puerto Rico Emergency Management Agency (PREMA)  
 Puerto Rico Aqueduct and Sewer Authority (PRASA)  
 Puerto Rico Department of Health (PRDOH)  
 Virgin Islands Department of Planning and Natural Resources (DPNR)  
 Virgin Islands Territorial Emergency Management Agency (VITEMA)  
 Virgin Islands Water and Power Authority (VIWAPA)  
 Virgin Islands Department of Health (VIDOH)  
 Virgin Islands Department of Waste Management (VIDWM)

### **4. Personnel On Site**

Additional EPA personnel and contractors are in the process of being deployed to impacted areas of PR and the VI.

EPA staff continue to participate in the NRCC in Washington, D.C. and also the REOC in Edison, NJ.

For more detailed information, see the Personnel Table in Resources, Section 2.2.1 of the SITREP.

### **5. Definition of Terms**

Assisting and Cooperating Agencies - Agencies who are assisting the EPA response, but are not a part of Unified Command.

E Goods - Electronic machines which contain hazardous components.

Emergency Response - any activity undertaken by the Operations Section which mitigated an immediate threat to human health or the environment.

ESF – Emergency Support Function. The ESFs provide the structure for coordinating Federal interagency support for a Federal response to an incident. They are mechanisms for grouping functions most frequently used to provide Federal support to States and Federal-to-Federal support, both for declared disasters and emergencies under the Stafford Act and for non-Stafford Act. incidents

FRP - Facility Response Plan. Under the Clean Water Act, as amended by the Oil Pollution Act, a plan for responding, to the maximum extent practicable, to a worst case discharge, and to a substantial threat of such a discharge, of oil. Required by certain facilities that store and use large quantities of oil.

Household Hazardous Waste - Small quantity waste from households that contain corrosive, toxic, ignitable, or reactive ingredients is hazardous. This includes pesticides, paint, solvents, etc.

Hazardous Debris - Debris which contains compounds that make it inappropriate for municipal landfill disposal.

JHA – Job Hazard Analysis.



MA - Mission Assignment.

QAPP - Quality Assurance Project Plan.

PPE - Personal Protective Equipment.

RCRA - Resource Conservation and Recovery Act.

RMP- Risk Management Plan. Under the Clean Air Act, certain facilities with large quantities of toxic potentially air born chemicals whose releases may impact human populations are required to submit to EPA a plan for hazard assessment, prevention, and emergency response.

Small Container - any container with a potential capacity of less than 5 gallons.

SPCC - Spill Prevention, Control and Counter-measure

TRI - Toxic Release Inventory - A publicly available EPA database that contains information on toxic chemical releases and other waste management activities reported annually by certain covered industry groups as well as federal facilities. This inventory was established under the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) and expanded by the Pollution Prevention Act of 1990.

Unified Command - A structure based on the Incident Command System (ICS) that brings together the Incident Commanders of all major organizations involved in the incident in order to coordinate an effective response, while at the same time allowing each to carry out their own jurisdictional, legal, and functional responsibilities.

White Goods - Large home electronics such as refrigerators, washing machines, and dryers.

WW - Wastewater Treatment Facilities

## **6. Additional sources of information**

U.S. EPA: [www.epa.gov/hurricane-irma](http://www.epa.gov/hurricane-irma), [www.epa.gov/hurricane-maria](http://www.epa.gov/hurricane-maria)

FEMA: [www.fema.gov/hurricane-irma](http://www.fema.gov/hurricane-irma)

VITEMA: [www.vitema.gov](http://www.vitema.gov) , <https://www.facebook.com/vitema/>

VIWAPA: [www.viwapa.vi/Home.aspx](http://www.viwapa.vi/Home.aspx)

National Hurricane Center: [www.nhc.noaa.gov](http://www.nhc.noaa.gov)

Government of USVI: [www.vi.gov](http://www.vi.gov)

Newspaper in USVI: <http://viconsortium.com/>

Government of PR: [www.pr.gov](http://www.pr.gov)

## **7. Situational Reference Materials**

Situational updates from the field and the Command and General Staff members are due to the Situation Unit by 1400 hours daily. Situation Reports are projected to be distributed by 1700 hours daily. In addition, Management Reports are distributed daily.

The REOC has established a dedicated viewer for presenting a Common Operating Picture (COP). The viewer can be accessed by visiting <https://r2.erccloud.org/er/irma/viewer.aspx>. Region 2 OSCs can access the viewer by inputting their TRACE credentials. Those that do not have access can request authorization by clicking on the "Create Account" tab, followed by "Request Access".